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August 28, 2000

Ms. Jean Baldrige
Santa Ynez River Technical Advisory Committee
590 Ygniacio Valley Road, Suite 200
Walnut Creek, California 94596

Dear Ms. Baldrige:

Lower Santa Ynez River Fish Management Plan (TAC Draft)

The Department of Fish and Game has reviewed the Lower Santa Ynez River Fish Management Plan dated July 25, 2000 and provides the following comments:

#1. Page EX-2: Under the section "Steelhead and Their Habitat" it states that "Recent surveys suggest that a small number of steelhead can enter the Santa Ynez River to spawn, usually in the lower tributaries (Salsipuedes and El Jaro creeks)."

> Comments: This statement is not clear. Does it suggest that Salsipuedes and El Jaro creeks are the preferred steelhead stream(s)? Table 2-3 suggest that from 1995 through 1999 adult steelhead were identified in Salsipuedes and El Jaro creeks four of the five years, in Hilton Creek adult steelhead were identified in three of the five years. This summer two large (>20 inches) were seen exhibiting spawning behavior in Alisal Creek (DFG Warden). **Adult steelhead have also been documented in Quiota Creek (DFG** Warden and Mr. Craig Fussaro, Cal Trout). Based on preliminary information, it would not be surprising to find that Quiota Creek supports the largest run of steelhead within the lower basin. Meaningful comparisons cannot be made until adequate studies have been conducted on the Quiota Creek trout population.

#2. Page EX6: In section II, the first bullet describes enhancement of steelhead rearing and spawning habitat through the establishment of conservation easements.

> Comments: The El Jaro drainage which includes Salsipuedes Creek is unique compared to other principal steelhead streams within the lower Santa Ynez River. The channel is rather deeply incised for most of its reach with stream banks consisting primarily of erodible marine deposits which include diatomite. The Department agrees with the comment on page 2-44, "Spawning habitat in Salsipuedes and El Jaro creeks is moderate, due to the

presence of fine sediments and sand in the stream, with some areas of good habitat." With the exception of a small reach (upper Salsipuedes Creek), the drainage maintains a low gradient. Studies on trout populations within the upper Santa Ynez River show a strong correlation between low stream gradient and low trout density. This relationship is supported by field observations, almost without exception, in all the trout streams and rivers surveyed by Department of Fish and Game biologists in southern California. Also, the literature suggests that the presence of exotic warm water piscivorous fish species is an indication that trout stream habitat is fundamentally poor (centrachids are found in the El Jaro/Salsipuedes drainage).

As limited as trout habitat conditions are, the El Jaro/Salsipuedes drainage is extremely important in that genetic introgression appears less than that found from the headwaters at Alder Creek downstream (Fish Management Plan, Appendicies, Molecular Genetic Population Structure in Steelhead / Rainbow Trout (*Onchorhynchus mykiss)* from the Santa Ynez River). Hilton Creek by comparison has very good trout habitat but genetic analysis suggests that hatchery trout predominate. The effects of this high proportion of hatchery trout in Hilton will need to be addressed with regard to artificial flows into Hilton during the period where steelhead migration has not recently occurred. The concern is that "pumping" water into Hilton will occur when the lake levels are below the point that the siphon is not operational. This suggests that there have been several years of low rainfall so that potential for steelhead migration into Hilton Creek is extremely low. The stilling basin supports a trout population. Based on the genetic analysis of Hilton trout it can be assumed that the ratio of trout haplotypes in Hilton Creek to some extent represents the ratio of haplotypes in the stilling basin. Under the conditions that trigger the use of the pump system, river conditions will be such that stilling basin trout will dominate spawning activity in Hilton Creek. Pumped water will provide summer rearing habitat for the spawn, and thousands of hatchery trout haplotypes will be released into the Santa Ynez River. Hatchery trout most likely spawned in Hilton Creek in the past under the conditions described above; however, the period of natural surface stream flow would have been short so that the success of the spawn would have been minimal. It is a real possibility that by sheer numbers hatchery trout could displace to some extent the native wildtype.

#3. Page 2-26: Under the "Water Temperature Tolerances" heading it states that "Rainbow trout/ steelhead in the Santa Ynez River may have higher tolerances, and therefore daily average temperatures of 20°C (68 °F) and 22°C (71.6°F) were used to examine relative habitat suitability."

Comments: Are these higher summer water temperature tolerances being reached or exceeded in the mainstem, in the critical tributaries? If so, are elevated water temperatures a limiting factor where they occur? The water temperature data is not included in this document. Is the summer water temperature data available for various reaches of the lower Santa Ynez River, Hilton Creek, Quiota Creek, and the El Jaro/ Salsipuedes drainage? Further, it would also be useful to include the water temperature

data during the WR 89-18 releases to better understand and to anticipate how these summer water temperatures will affect trout in the mainstem.

#4. Page 2-27,Table 2-3: "Relative Abundance of Rainbow Trout in the Lower Santa Ynez River Basin"

Comments: The relative abundance data included in this table yields good information if the assumption is made that the methods, time frames, and other data gathering methods have been standardized. A few examples of things that should have been standardized are: the seasons during the survey period, sampling methods utilized, sampling period(s), stream lengths surveyed (or corrected for). The principal concern is that there is a bias indicating a false relative high abundance or other false relationships if standardizing the data is not performed. The Relative Abundance Table does not indicate if these data were standardized.

#5. Page 3-8, Table 3-2:

Comments: Are there estimates as to the amount of stream flow needed to achieve Target Flows at the Target Sites? It appears that these Target Flows are part of the Adaptive Management Account, and illustrate the importance of this Account toward maximizing biological needs with minimal waste of water.

#6. Page3-15: The first paragraph states that the supplemental watering system "will operate both gravity feed (system in place) and a pumping system (in place in 2002)."

Comments: See comments to #2.

#7. Page 3-20: The "Relocation Sites Removal of Predatory Fish" section describes the potential to relocate small trout into sections of stream that are occupied by warmwater predatory fish with the option to remove predatory species.

Comments: The success of this option is questionable: 1) not all predatory fish will be removed and the remnant population will thrive due to lessened intraspecific competition; 2) the stilling basin as well as other reaches of the stream will continue to supply predatory fish. An option not discussed which may have merit is to create exclosure sites and relocate trout into these sites. That measure can be as basic as installing netting within a selected reach of stream followed by removal of undesirable species within the exclosure. This concept is utilized in the form of pen culture for white sea bass and chinook salmon in Santa Barbara and San Luis Obispo counties and elsewhere.

Other Comments: **MITIGATION IN KIND, OFF SITE.** The Department has been evaluating benefits to steelhead trout populations as a result of relative low flow releases on streams of the coastal slope of Santa Ynez Mountains. Specifically, the Department is assessing benefits to the trout fishery in Mission Creek within the City of Santa Barbara as a result of 20+ gpm summer/fall releases from the city's valve works site located within the upper reach of Mission Creek. The first releases were made in the summer of 1999 and lasted through the fall. Releases into Mission Creek were again initiated in July of this year.

The releases created summer steelhead habitat for a reach of approximately three river miles. These three miles of stream go dry in late summer under what are now natural conditions. Last year's results were extremely promising in that most pool and riffle habitat within the three-mile reach of stream maintained trout into the winter. Several pools have maintained several age class of trout to include young of the year up to 16+ inch adults. Releases into Mission Creek also maintained surface flow in Rattlesnake Creek in proximity to the confluence of Mission Creek where a sizeable trout population survived as a result of the releases.

The amount of flow required to maintain the trout fishery in Mission Creek as well as possible future diversions into Sycamore Creek is about 39-acre feet per season (5 month period). Under the conditions described in the Interim Fish Passage Account the 39-acre feet requested for In Kind/Off-Site Mitigation amounts to 1.5 % of the 2500-acre feet at the 0.75' surcharge. With the flashboards (3' surcharge) in place this amount drops to less than 0.5 %. In terms of steelhead restoration the cost-to-benefit ratio for this proposal is as high or higher than most of the projects underway or proposed for the Lower Santa Ynez River.

Finally, it is likely that the residents of the City of Santa Barbara will strongly endorse this project as indicated by the amount of support shown recently.

Thank you for a chance to comment on a document that clearly has so much time and effort invested. Should you have any questions please contact Mr. Mauricio Cardenas at (805) 640-1852.

Sincerely,

C. F. Raysbrook
Regional Manager

MC:mc/sl

File:Chron
file: final syr manage plan